

## SEQUENCE LISTING

<110> Connex GmbH

<120> Immunological reagent specifically interacting with the extracellular domain of the human zeta chain

<130> C1368PCT

<140> 09/743,482

<141> 2001-01-10

<150> EP 98 11 2867.1

<151> 1998-07-10



<160> 18

<170> PatentIn Ver. 2.1

<210> 1

<211> 33

<212> DNA

<213> Rattus norvegicus

<220>

<221> CDS

<222> (1)..(33)

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Gln Ala Ser Gln Asp Ile Gly Asn Trp Leu Ala

1

5

10

33

<210> 2

<211> 11

<212> PRT

<213> Rattus norvegicus

<400> 2

Gln Ala Ser Gln Asp Ile Gly Asn Trp Leu Ala

1

5

10

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<211> 21

<212> DNA

<213> Rattus norvegicus

<220>

<221> CDS

<222> (1)..(21)

<400> 3

A: 11/01/01

agt gca acc agc ttg gca gac  
 Ser Ala Thr Ser Leu Ala Asp  
 1 5

<210> 4  
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 <213> Rattus norvegicus

<400> 4  
 Ser Ala Thr Ser Leu Ala Asp  
 1 5

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<220>  
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 <222> (1)..(27)

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 1 5

<210> 6  
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 <212> PRT  
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<400> 6  
 Leu Gln Arg Tyr Ser Asn Pro Asn Thr  
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 Gly Tyr Thr Phe Thr Ser Tyr Asp Met His  
 1 5 10

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 <213> Rattus norvegicus

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 Gly Tyr Thr Phe Thr Ser Tyr Asp Met His  
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 <213> Rattus norvegicus

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 <222> (1)..(51)

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 ggg 51  
 Gly

<210> 10  
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 <212> PRT  
 <213> Rattus norvegicus

<400> 10  
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           1                  5                  10                  15  
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 <212> DNA  
 <213> Rattus norvegicus

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 <222> (1)..(42)

<400> 11

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 <212> PRT  
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 <212> DNA  
 <213> Rattus norvegicus

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 1 5 10 15

tca gtg aaa att tcc tgc aag gct tct ggc tac aca ttc acc agt tac 96  
 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30

gat atg cac tgg ata aaa cag cag cct gga aat ggc ctt gag tgg att 144  
 Asp Met His Trp Ile Lys Gln Gln Pro Gly Asn Gly Leu Glu Trp Ile  
 35 40 45

ggg tgg att tat cct gga aat ggt aat act aag tac aat caa aag ttc 192  
 Gly Trp Ile Tyr Pro Gly Asn Gly Asn Thr Lys Tyr Asn Gln Lys Phe  
 50 55 60

aat ggg aag gca aca ctc act gca gac aaa tcc tcc agc aca gcc tat 240  
 Asn Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr  
 65 70 75 80

atg cag ctc agc agc ctg aca tct gag gac tct gca gtc tat ttc tgt 288  
 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys  
 85 90 95

gca aga gat tgg cat tac tat agc agc tat atc cgt ccc ttt gct tac 336  
 Ala Arg Asp Trp His Tyr Tyr Ser Ser Tyr Ile Arg Pro Phe Ala Tyr  
 100 105 110

tgg ggc caa ggc act ctg gtc act gtc tct tca 369

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
115 120

<210> 14

<211> 123

<212> PRT

<213> Rattus norvegicus

<400> 14

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ser  
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
20 25 30

Asp Met His Trp Ile Lys Gln Gln Pro Gly Asn Gly Leu Glu Trp Ile  
35 40 45

Gly Trp Ile Tyr Pro Gly Asn Gly Asn Thr Lys Tyr Asn Gln Lys Phe  
50 55 60

Asn Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr  
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys  
85 90 95

Ala Arg Asp Trp His Tyr Tyr Ser Ser Tyr Ile Arg Pro Phe Ala Tyr  
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Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
115 120

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<211> 321

<212> DNA

<213> Rattus norvegicus

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<221> CDS

<222> (1)..(321)

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gaa att gtc acg atc aca tgc cag gca agc cag gac att ggt aat tgg 96  
Glu Ile Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Gly Asn Trp  
20 25 30

tta gca tgg tat cag cag aaa cca ggg aaa tct cct caa ctc ctg atc 144

Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ser	Pro	Gln	Leu	Leu	Ile	
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Tyr	Ser	Ala	Thr	Ser	Leu	Ala	Asp	Gly	Ile	Pro	Ser	Arg	Phe	Ser	Gly	
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Ser	Arg	Ser	Gly	Thr	Gln	Tyr	Ser	Leu	Lys	Ile	Ser	Arg	Leu	Gln	Val	
	65				70					75					80	
gaa	gat	act	gga	atc	tat	tac	tgt	cta	cag	cgt	tat	agt	aat	ccc	aac	288
Glu	Asp	Thr	Gly	Ile	Tyr	Tyr	Cys	Leu	Gln	Arg	Tyr	Ser	Asn	Pro	Asn	
				85					90					95		
acg	ttt	gga	gct	ggg	acc	aag	ctg	gag	ctg	aaa						321
Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys						
			100					105								

&lt;210&gt; 16

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Rattus norvegicus

&lt;400&gt; 16

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ala	Ser	Leu	Ser	Ala	Ser	Pro	Glu
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Glu	Ile	Val	Thr	Ile	Thr	Cys	Gln	Ala	Ser	Gln	Asp	Ile	Gly	Asn	Trp
		20					25						30		

Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ser	Pro	Gln	Leu	Leu	Ile
	35						40					45			

Tyr	Ser	Ala	Thr	Ser	Leu	Ala	Asp	Gly	Ile	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				

Ser	Arg	Ser	Gly	Thr	Gln	Tyr	Ser	Leu	Lys	Ile	Ser	Arg	Leu	Gln	Val
	65				70					75					80

Glu	Asp	Thr	Gly	Ile	Tyr	Tyr	Cys	Leu	Gln	Arg	Tyr	Ser	Asn	Pro	Asn
				85					90					95	

Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys
			100					105		

&lt;210&gt; 17

&lt;211&gt; 1637

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic construct of DNA encoding bispecific single chain antibody comprising anti-zeta-chain/anti-EpCAM domains.

<400> 17

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gaattcacca tgggatggag ctgtatcatc ctcttcttgg tagcaacagc tacagggtgta 60
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gtcacgatca catgccaggc aagccaggac attggttaatt ggtagcatg gtatcagcag 180
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gtttatttct gctctcaaag tacacatgtt ccgtacacgt tcggaggggg gaccaagctt 1560
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gccgctctag agtcgac 1637

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<210> 18

<211> 532

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic construct of DNA encoding bispecific single chain antibody comprising anti-zeta-chain/anti-EpCAM domains.

<400> 18

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Val His Ser Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala
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Ser Pro Glu Glu Ile Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile

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35

40

45

Gly	Asn	Trp	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ser	Pro	Gln
50						55					60				
Leu	Leu	Ile	Tyr	Ser	Ala	Thr	Ser	Leu	Ala	Asp	Gly	Ile	Pro	Ser	Arg
65					70					75					80
Phe	Ser	Gly	Ser	Arg	Ser	Gly	Thr	Gln	Tyr	Ser	Leu	Lys	Ile	Ser	Arg
				85					90					95	
Leu	Gln	Val	Glu	Asp	Thr	Gly	Ile	Tyr	Tyr	Cys	Leu	Gln	Arg	Tyr	Ser
			100					105					110		
Asn	Pro	Asn	Thr	Phe	Gly	Ala	Gly	Thr	Lys	Leu	Glu	Leu	Lys	Gly	Gly
		115					120					125			
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val	Gln
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Leu	Gln	Gln	Ser	Gly	Ala	Glu	Leu	Val	Lys	Pro	Gly	Ser	Ser	Val	Lys
145					150					155					160
Ile	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr	Asp	Met	His
				165					170					175	
Trp	Ile	Lys	Gln	Gln	Pro	Gly	Asn	Gly	Leu	Glu	Trp	Ile	Gly	Trp	Ile
			180					185					190		
Tyr	Pro	Gly	Asn	Gly	Asn	Thr	Lys	Tyr	Asn	Gln	Lys	Phe	Asn	Gly	Lys
		195					200					205			
Ala	Thr	Leu	Thr	Ala	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Met	Gln	Leu
		210				215					220				
Ser	Ser	Leu	Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Phe	Cys	Ala	Arg	Asp
225					230					235					240
Trp	His	Tyr	Tyr	Ser	Ser	Tyr	Ile	Arg	Pro	Phe	Ala	Tyr	Trp	Gly	Gln
				245					250					255	
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln
			260					265					270		
Leu	Leu	Glu	Gln	Ser	Gly	Ala	Glu	Leu	Ala	Arg	Pro	Gly	Ala	Ser	Val
		275					280					285			
Lys	Leu	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asn	Tyr	Gly	Leu
		290				295					300				
Ser	Trp	Val	Lys	Gln	Arg	Pro	Gly	Gln	Val	Leu	Glu	Trp	Ile	Gly	Glu
305					310					315					320
Val	Tyr	Pro	Arg	Ile	Gly	Asn	Ala	Tyr	Tyr	Asn	Glu	Lys	Phe	Lys	Gly
				325					330					335	



Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Ser Met Glu  
340 345 350

Leu Arg Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys Ala Arg  
355 360 365

Arg Gly Ser Tyr Asp Thr Asn Tyr Asp Trp Tyr Phe Asp Val Trp Gly  
370 375 380

Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly  
385 390 395 400

Gly Gly Ser Gly Gly Gly Gly Ser Glu Leu Val Met Thr Gln Thr Pro  
405 410 415

Leu Ser Leu Pro Val Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg  
420 425 430

Ser Ser Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr Leu His Trp  
435 440 445

Tyr Leu Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val  
450 455 460

Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser  
465 470 475 480

Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu  
485 490 495

Gly Val Tyr Phe Cys Ser Gln Ser Thr His Val Pro Tyr Thr Phe Gly  
500 505 510

Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr Thr Ser His His His His  
515 520 525

His His Thr Ser  
530

*Handwritten:* A Cont

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